

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A machine-implemented method for upgrading the schema of a database, comprising:

updating a database update message from a first version to an upgraded version by chaining through one or more intermediate upgraded versions, wherein updating comprises[[:]]

receiving an update message having a first version format[[:]]₁ and

repeatedly generating a revised update message having a next most

recent version format based on the update message until a final update

message having ~~an~~ the upgraded version format is generated; and

applying the revised update message to the database to write an upgraded version of the schema of the database.

2. (Previously presented) The method of claim 1, wherein generating a revised update message having a next most recent version format includes:

receiving a first update message; and

calling a next most recent version mapping function to map contents of the first update message to generate a second update message.

3. (Original) The method of claim 1, wherein the update message includes a set of records for a database in the first version.

4. (Original) The method of claim 3, wherein the set of records for the database in the first version is a complete set of records for the database.

5. (Currently amended) An article of manufacture comprising:

a computer readable storage medium having instructions stored thereon, which when executed by a computer, cause the computer to perform a method for upgrading the schema of a database, comprising[[:]]

updating a database update message from a first version to an upgraded version by chaining through one or more intermediate upgraded versions, wherein updating comprises

receiving an update message having a first version format[[:]], and
generating repeatedly a revised update message having a next most recent version format based on the update message until a final update message having an the upgraded version format is generated; and
applying the revised update message to the database to write an upgraded version of the schema of the database.

6. (Previously presented) The article of manufacture of claim 5, the method further comprising:

receiving a first update message; and

calling a next most recent version mapping function to map contents of the first update message to generate a second update message.

7. (Previously presented) The article of manufacture of claim 5, wherein the update message includes a set of records for a database in the first version.

8. (Previously presented) The article of manufacture of claim 7, wherein the set of records for the database in the first version is complete set of records for the database.

9. (Currently amended) ~~An apparatus for updating a message from a first version of schema to an upgraded version of schema by chaining through intermediate versions comprising:~~

means for updating a database update message from a first version to an upgraded version by chaining through one or more intermediate upgraded versions, wherein updating comprises

receiving an update message having a first version format $[[;]]_1$ and

~~means for repeatedly generating a revised update message having a next most recent format based on the update message until a final update message having an the upgraded version format is generated; and~~

means for applying the revised update message to a database to write an upgraded version of a schema of the database.

10. (Previously presented) The apparatus of claim 9, further comprising:

means for receiving a first update message; and

means for calling a next most recent version mapping function to map contents of the first update message to generate a second update message.

11. (Original) The apparatus of claim 9, wherein the update message includes a set of records for a database in the first version.

12. (Original) The apparatus of claim 11 wherein the set of records for the database in the first version is a complete set of records for the database.

13. (Currently amended) An apparatus for upgrading the schema of a database, comprising:

a network switching device to receive an update message having a first version format and

a controller card to update a message from a first version to an upgraded version by chaining through intermediate upgraded versions, the controller card to repeatedly ~~generate~~ generating a revised update message having a next most recent version format based on the update message until a final update message having ~~an~~ the upgraded version format is generated and apply the upgraded version of the update message to the database to write an upgraded version of the schema of the database.

14. (Previously presented) The apparatus of claim 13, wherein the network switching device receives a first update message.

15. (Previously presented) The apparatus of claim 14, further comprising:

A mapper to call a next most recent version mapping function to map contents of the first update message to generate a second update message.

16. (Previously presented) The apparatus of claim 13, wherein the update message includes a set of records for a database in the first version.

17. (Previously presented) The apparatus of claim 16, wherein the set of records for the database in the first version is a complete set of records for the database.